

## Patent Abstracts of Japan

PUBLICATION NUMBER : 02009614  
PUBLICATION DATE : 12-01-90

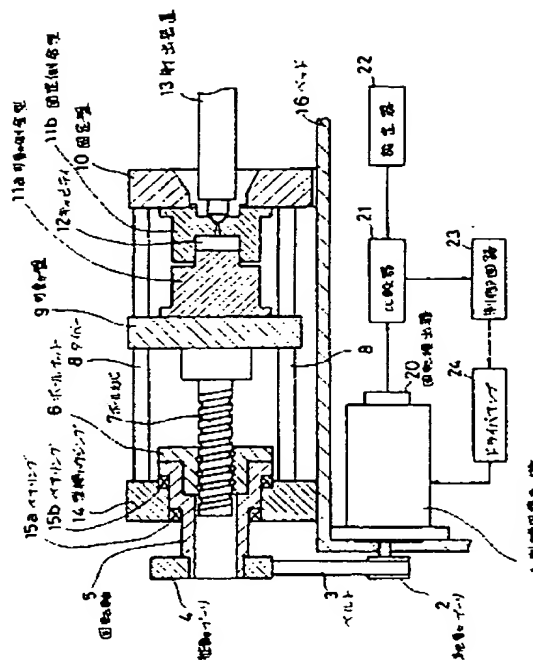
APPLICATION DATE : 29-06-88  
APPLICATION NUMBER : 63159070

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INT.CL. : B29C 45/70 B29C 45/66 B29C 45/80

TITLE : INJECTION COMPRESSION CONTROL METHOD OF ELECTRICAL INJECTION MOLDING MACHINE AND APPARATUS THEREOF



ABSTRACT : PURPOSE: To enable the assembly process to be shortened and the product to be manufactured in low cost without being generated any defective accurate disorder by detecting the mold opening degree of a mold by means of a rotation detector provided in a clamping electric motor.

CONSTITUTION: A clamping electric motor 1 is rotated at low torque by the command from a control circuit 23, and a movable disc 9 is advanced to the direction of a fixed disc 10 for performing clamping. In consequence thereof, as a molten synthetic resin is injected into a cavity 12, the mold is opened by the pressure. Through this mold opening, a ball-nut 6 and a revolutionary shaft 5 are rotated in reverse to each other, further, the clamping electric motor 1 is rotated in opposite direction via a driven pulley 4, belt 3 and a drive pulley 2. The reverse rotation degree is detected by a rotation detector 20, and inputted into a comparator 21 and compared with the setting value corresponding to the arbitrary mold opening degree set beforehand in a setting device 22, so that the comparator 21 outputs an output signal as the both coincides with each other in order that the control circuit 23 acts to allow the clamping electric motor 1 may rotate in high torque for carrying out a re-clamping, thereby compressing the molten synthetic resin filled within the mold cavity 12.

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